



The Shape Of Things To Come

—By Robert KA5WSS

Things seem to be changing quickly these days. I'm starting to get old enough to recognize that the ever increasing pace of change has been a constant refrain for decades. For some, the changes are long overdue movement forward. For others, they may be an unwelcome abandonment of the known and comfortable.

Amateur Radio has had its fair share of uncomfortable transitions and moments of inflections. Spark versus CW. AM versus SSB. Incentive licensing. The Internet. No code. And yet, despite all of the turmoil and cries of the coming ruination of Ham Radio we're still here and having fun and learning new things.

FT8 is not real Ham Radio and it's ruining the hobby! FT8, and some other related modes, have taken Amateur Radio by storm. A recent post by [ClubLog](#) shows that FT8 skyrocketed to [60% of all QSOs logged on HF](#) on their service.

While Cycle 25 has started its rise in solar intensity, we are still near the solar minimum and propagation is a mere shadow of its solar peak potential. Weak signal digital modes like

FT8 open up the possibility of DX contacts, however brief, in conditions and with equipment that otherwise would be impossible at this time. The automated nature of reception and signal reports make it more likely that occasional band opens are found and taken advantage of. This means more contacts, fun and a better understanding of RF propagation.

The new RF safety measures will shut us all down! We've known it was coming for some time. That day has finally arrived. The FCC has announced that [updated frequency exposure rules will go into effect on May 3rd](#). Previously, Amateur Radio was afforded a specific exemption that allowed us to avoid even thinking about the issue of RF exposure levels in almost all cases. Does this really mean the end of Ham Radio?

Things are not so bleak. The acceptable levels of RF exposure are not changing from what had already been in place. What is changing is the removal of the near blanket exemption for Amateur Radio. There is a [simple online calculator](#) that can help you check for compliance for your station. The ARRL has a [page with links and resources for RF safety](#). Chances are the vast majority of Hams are already in compliance anyway. Now, you just to be certain of this.

April 18th is [World Amateur Radio Day](#). The annual event celebrates the founding of the

[International Amateur Radio Union](#) by our own [ARRL](#) and other national Amateur Radio organizations in 1925. Amateur Radio has weathered over 100 years of technological and political change. The bands in the 1920s are very different from the bands today in every way, save for one. There was change afoot. We'll all survive this too. Let's go have some fun!

NEXT MEETING

Wed, April 21, 2021, 7:30pm

Zoom meeting room info will be emailed later.

Topic: DIY Junk Box Antennas

Presenter: JB Still (NR5NN)

Minutes of the March 17 Meeting

Meeting was held together on ZOOM by KA5WSS

KA5WSS (Robert), KD6FIL (Dave), KG6QNT (Eileen), KB6CLV (Simon), N6LY (Elizabeth), AA6RH (Randy), N7PIB (Sanford), KE6HID (Andrew), KM6ZUC (Bruce), WD6BOR (Darrel), N6FP (Doug), W8EWL (John), N7TSQ (Joe), WB6TMH (Mike), KI6JNU (Mo), NJ6E (Stan), K6YD (WingLok), KH6GJV (Bill), W1EJ (Ed), K6YD (Kevin)

Guest: KJ6DGZ (Mathison), Steve's Iphone

Meeting called to order at 19:30 by KA5WSS

MINUTES

Minutes from the February meeting accepted as written.

NEWS LETTER EDITOR

No updates.

VE Liaison

VE session is scheduled for April 24 in the Sonoma PD Training Room. You need to register for the test. See

<http://vomarc.org/licensing.html> for additional information.

TREASURER

Currently have \$4,945 in the bank. VOMARC set it up to pay dues online.

Still have not purchased a printer.

SECRETARY

No Updates. The VOMARC Breakfast on the Air is going well.

Light Houses on the Air is scheduled for August 21 & 22. KG6N is working on coordinating with the Parks Service for permits.

TRUSTEE

No updates.

PRESIDENT

Net control checklist coming soon.

NEW BUSINESS

KI6JNU ask if the club will like to join the Boy Scouts doing JOTA on October 15-17. More information to follow.

OLD BUSINESS

VOMARC Hamfest – scheduled for October 2 at the Congregational Church on Spain Street thanks to WD6BOR's efforts. More details to follow.

The Sonoma County DMR net is still going at 1830 on Thursdays on talk group 31707.

Mystery Box: Jack, K6ZMF has the box and the Mystery Box program is on hold for a while

Next Month's Program: Junk Box Antennas by NR5NN

PROGRAM: Mesh Network in the East Bay by Mathison Ott, KJ6DZB

Meeting adjourned at 2100ish.

—Submitted by Dave KD6FIL

VE Liaison News

—by Elizabeth N6LY

Want to get started in HAM radio? Ready for an upgrade?

Now is the time before the new licensing fees go into effect.

Projected to be mid-summer. More to come on this as the details are rolled out.

This month it still only costs \$15 to get your license or renew.

It's not too late to sign up for our next Testing session.

Also, as an extra bonus, everyone who tests will receive a free year's membership in the club.(whether you pass or need to try again)

We will be holding test session on Saturday, April 24 at the

Sonoma Police Station EOC room - 126 1st St W, Sonoma.

We still have openings for the 10:00 AM session. If we get enough response and fill up the 10:00 session, we will have an additional session at noon.

Since we are still practicing COVID 19 precautions, we can only allow 6 candidates per session.

Seating will be spaced at 6-foot intervals and will be sanitized before and after each session.

Everyone must wear a mask.

Reservations are required, so if you wish to test, please send me an email. [n6ly.emm \(at\) gmail.com](mailto:n6ly.emm@gmail.com)

Jamboree-on-the-Air

—by Moe KI6JNU

At last month's club meeting, I made an initial inquiry to see if there would be club interest in

supporting our local scouting units in participating in Jamboree-on-the-Air, an international scouting event supported by amateur radio. I am interested in having an HF station and 2M/70cm station(s) for the scouts. This year, JOTA is scheduled for October 15th-17th. I would specifically be asking for participation on Saturday October 16th.

In the past, SCRA has supported events for scouting units in the Santa Rosa Plain. I am hoping that the club can provide the opportunity for local units in the Valley to participate.

Below are excerpts from <https://www.scouting.org/international/jota-joti/jota/> and from "Guidelines for Amateur Radio Operators".

"Jamboree-on-the-Air, or JOTA, is the largest Scouting event in the world. It is held annually the third full weekend in October. JOTA uses amateur radio to link Scouts and hams around the world, around the nation, and in your own community."

"JOTA is a spectacular opportunity to introduce Scouts to amateur radio. For many, this will be their first exposure to the world of ham radio. Some will go on to become hams, enjoying the hobby for a lifetime. A few will even find the basis of a career in science and technology."

"We've assembled a fair bit of information here to help you work with your Scouting partner in setting up this event. You should also consult the American Radio Relay League information at www.arrl.org/jamboree-on-the-air-jota."

Who's Doing What

Sanford (N7PIB) has now worked 1079 unique parks as part of the [Parks on the Air](#) program.

Ed (W1EJ) has activated at least 300 summits (123 unique locations) as part of the [Summits on the Air](#) program. Most recently he activated Mount Tam during the weekend of March 20-21.

Carl (N6TVN) worked 12 contacts in the VA QSO Party, despite the poor conditions. He also worked Botswana on 40M and 80M on CW with 200 watts after the [CQ WPX contest](#).

Robert (KA5WSS) recently worked his 50th state (RI) for [Worked All States](#) on 40M.

—Submitted by Robert KA5WSS

NCDXF Announces Major Grant Award To 3YØJ Bouvet Island DXpedition

The [Northern California DX Foundation](#) is pleased to announce it will be the Lead Sponsor (\$100,000) to the Intrepid DX Group's [3YØJ Bouvet Island DXpedition](#) planned for January/February 2023. Bouvet Island is currently ranked #2 globally on the Club Log Most Wanted List.

NCDXF-supported DXpeditions have activated many of the ten most-needed entities. NCDXF-funded DXpeditions during Cycle 24 have put well over 1 million QSOs into DXers' logs! We expect to continue this mission for Cycle 25 and beyond.

DXpeditions to rare entities like Bouvet Island that are so remote are becoming



more expensive and difficult to reach, a trend that we believe will continue. In the last three years, two DXpeditions have attempted activation of Bouvet, but severe storms

damaged ships that were so very close.

—Submitted by Robert KA5WSS

Misc

- VOMARC members asked about obtaining a copy of Mathison Ott's (KJ6DZB) presentation on the high speed MESH data network. In addition to his [slide deck](#), you can also watch another [presentation he made available on YouTube](#).
- Speaking of FT8, [Remote Ham Radio](#) has announced a new feature that lets you [control remote stations and make contacts using FT8](#). Previously, users had to install WSJT-X and control the radio through virtual ports, which can sometimes be a pain to set up. Now no software installation of any kind is required at all. It's all done through your web browser.
- Outside magazine contained an [article about Amateur Radio's Summits of the Air \(SOTA\)](#) participants.
- In a temporary reprieve, the [FCC agreed with ARRL arguments in favor of continued Amateur access to the 3.5 GHz band](#) until possible replacement spectrum near 3.1 GHz is decided upon.
- Germany [bans water "vitalizer"](#) that doesn't improve water at all, but does cause lots of RF interference.

—Submitted by Dave KD6FIL

A TALE OF TWO KEYS

—by Ed W1EJ

Back in the days before Covid-19 came along I always enjoyed getting up before the crack of dawn, driving to Sonoma in the fog, meeting up at NJ6E's house, crowding into another car with several other club members, then heading off to a ham-fest in Sacramento, Lincoln, or even far-off Loomis. Each of us had our own idea of the ultimate bargain to find. Mine was usually an old straight key or bug, not missing parts, needing a good cleaning and adjustment, and not one that I already have unless it is in much better condition. So, what does one do to satisfy the craving for another mechanical marvel for generating dits and dahs? Of course, eBay, QRZ, eham, Craigslist, Facebook Marketplace, or even SCRA or VOMARC sites are there to search, but bargains are hard to find.

A few months back on Craigslist there was a listing for an estate sale in Petaluma. From the pictures I could tell it was that of W6WR, Jim Scagliola, a recent SK. Unfortunately, the sale had been on the weekend already passed. But, after further checking, I found out the sale would be on again the following weekend! I went early on the next Saturday and saw that most of the high-end things from the ad were gone but I wasn't looking for those. The prices on things looked reasonable and became even more so when they said it was half price day! I picked out a couple of 2 Meter mobile units, a Signalink USB, and some miscellaneous items, including an old key mounted on a board. The key was very grungy

(technical term) and was a "leg" key meant to be mounted on a desk or table, so I knew it was an oldie. A closer look, after wiping away some dirt, I could see stamped "J.H. Bunnell" and "Postal Telco"; and on the transverse part of the lever "PATENTED FEB 15 18??".

I let it set for a week or so then started cleaning. The base appears to be copper and it cleaned up nicely, mostly with a toothbrush, a greenie (nylon scrub pad), and Flitz polish. The brass screws and nuts with knurled ends shined up quickly with a Dremel brush and Flitz. The lever was a challenge. It was probably nickel plated at one time but that flaked off. Some 600-grit sandpaper and lots of rubbing with a cloth and more Flitz was applied. I took it easy on the lettering so as not to make it worse than it was. Under a magnifier it looked like 1881. A Google search of patents from 1881 and there it was, patent #237808.

The main improvement over previous keys was the single piece stamped steel lever with the trunnions machined on the transverse part. Prior keys had round levers, or a flat brass with the trunnion attached or inserted. These had too much flex and sideways movement causing erratic contact closure. The Bunnell design continues to today.

Another article I found said the stamped patent information was dropped after a year. Later keys did not have that; so, I believe the key was made in 1881 or 1882. Other than sanding I haven't refinished the board yet. At some point I will mount a sounder on it.



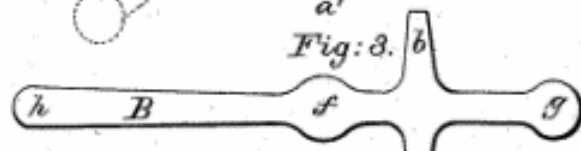
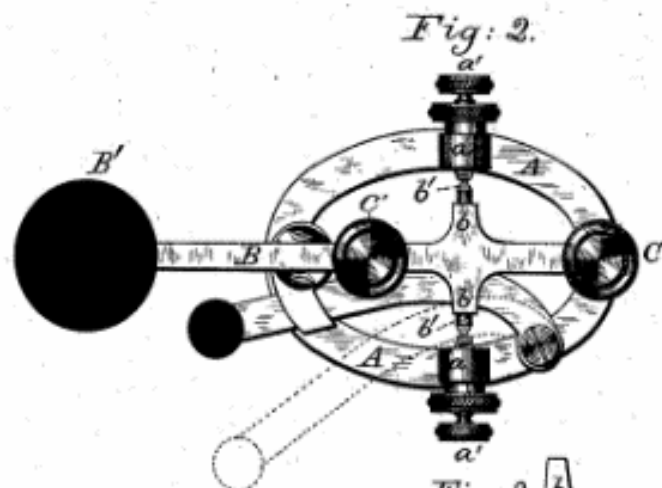
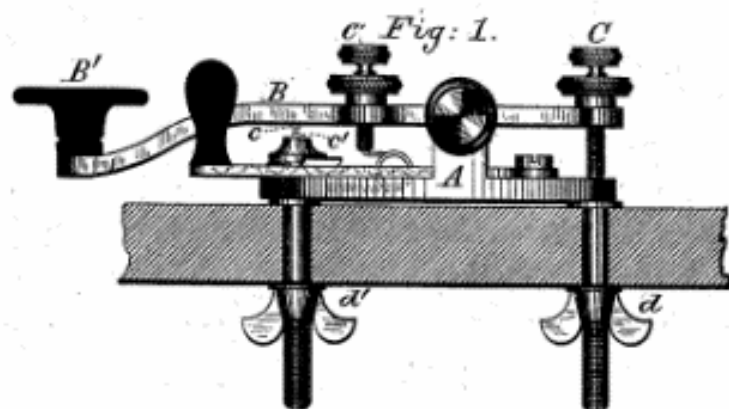


(Model.)

J. H. BUNNELL..
Telegraphic Key.

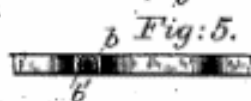
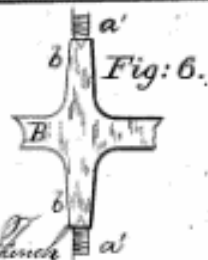
No. 237,808.

Patented Feb. 15, 1881.



Witnesses;

Walter C. Case
Mrs. H. Edward Finch



Inventor.

Jesse H. Bunnell
by his Attorney,
Frank L. P. Fy

While in the process of cleaning the Bunnell key I saw another Craigslist item of old ham equipment for sale. The pictures were not promising but I decided to go check it out since the address was in nearby Sebastopol. I pulled up to the gate that was unlocked but did not enter because the dog there was almost as big as I am. I called the seller on the phone and he came out and let me in; the dog was very friendly. The stuff was stored in a not very weatherproof shed. He said it belonged to his father (KB2A) who had passed away many years ago.

I dug through the box while avoiding a few spiders. In there was a large AMP Supply antenna tuner, a Yaesu stand microphone, a basic field strength meter, a rusted old open frame power supply, and a straight key mounted on a metal base. All items were grungy (that tech term again), with some rust and corrosion, and the spider family. I offered him \$25 and surprise, surprise he took it. He helped me put the stuff in my Jeep and I let him keep the power supply, and most of the spiders.

The key was one I have been looking for over the years; a Signal Electric Company key made in Menominee Michigan. They made this type and a couple of others for many years starting in about 1919. Their high end "marine" R-6x keys are more

collectible and had choices of three different size contacts. The one I found Model R-48 is the mid-range key used for land line or wireless operation. They were made as late as the 1950s with no noticeable changes so I can't really determine the key's vintage. These keys sell for \$50 and up on eBay depending on condition.

The key cleaning process was much the same as before on the Bunnell key. Toothbrush, Flitz, greenies, cloths, more Flitz, Dremel, and 600-grit paper were used. There was an inked label on the shorting bar saying "Tested OK" but that went away with the first wipe of polish. Another step that I did not mention before is after all the cleaning and polishing, then all the parts are washed in hot soapy water then dried in a warm oven. When reassembling I usually use a tiny dab of Deoxit on some of the screws to keep out corrosion where dissimilar metals are joined.

I am quite pleased with the way it turned out. I don't think the skirt on the knob is original, but I like it. The two wire retaining screws were knurled ones originally so I will look for some replacements. In use it feels great, is smooth and positive mechanically, and the heavy base keeps it from bouncing around.





So, that is my tale of two keys. It would have been great to be able to swap stories on the long ride home from Lincoln, after a nice breakfast paid for by Stan NJ6E; and, setting the date for the next Ham-swap in our phones. I know it will happen again

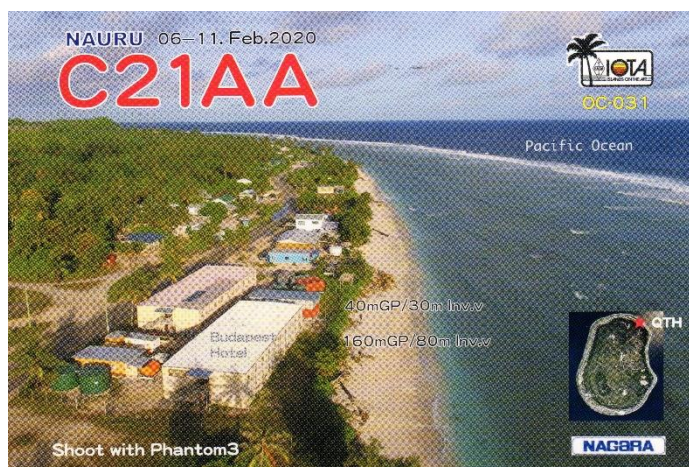
soon, Stan will be looking for an old 80s Kenwood rig to fix, Jim K6UUW will be along in spirit digging out a box of parts to use for the High School Electronics club class, Mike WB6TMH will find a great piece of test gear, and of course I will be scrounging for

another key. Who knows, someday I may have as many as Darrel WD6BOR.

QSL Card Inbox



I worked this St. Helena station on 10M SSB about 4 years ago towards the back end of Cycle 24. Just got around to QSLing the contact now.



I worked C21AA on 80M FT8. Had to resort to a remote station to make this contact. Way too far out for my home station on 80M.

QSL Card Inbox (cont)

KH2L
 Ex K2QGC, KA2EP (Japan),
 KG6ARH, AH2BV, and AH2L.
 WAZ 27 ITU 64
 IOTA OC-026 Loc QK23ji

Greetings from Guam

4 de SteppIR DB 32

CFM QSO with: KA5WSS					
Day	Month	Year	UTC	MHz	Mode
29	02	2020	0619	10.1	FT8
Report			-15		

QSL manager W3HNK Thanks for QSO / QSL

QSL manager W3HNK UN3UO print Edward H Poppe
 25 Kristina Ln
 Yona, GU 96915 USA

I did, however, work Guam on 30M using FT8 from my modest home station.



Who wouldn't like to work DX from this QTH? Contacts with J68HZ were made using FT8 on both 20M and 40M.

—Submitted by Robert KA5WSS

THE VOMARC WIRELESS

VOLUME 25 EDITION 4

A publication of VOMARC, the Valley of the Moon Amateur Radio Club – W6AJF

Frank C. Jones – W6AJF

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Robert Barron, KA5WSS – Webmeister

“Receipt of the Wireless is one of the most sought after benefits of membership in VOMARC.”—S. Marler

WEB PAGE: <http://www.vomarc.org/>

Nets are held every Wednesday night at 19:30 (7:30 P.M.) local, except meeting nights on the 145.350 repeater, -600 kHz, PL 88.5 Hz.

Breakfast Nets are held every Tuesday and Saturday morning at 7:30 AM on the 146.205, +600, PL 88.5 Hz repeater.

Comments and submissions of material may be sent to:

Eileen@vom.com

—OR—

Valley of the Moon ARC, Inc.

C/O Sonoma Police Department

175 First Street West

Sonoma, CA 95476

2021 ACS Net Control Assignments

	Name	Call
JANUARY	MOE	KI6JNU
FEBRUARY	SCOTT	KJ6QIQ
MARCH	SCOTT	KJ6QIQ
APRIL	JIM	K6UUW
MAY	DICK	KF6FZM
JUNE	MOE	KI6JNU
JULY		
AUGUST	BILL	KJ6EIG
SEPTEMBER	SAM	W5LTP
OCTOBER	DICK	FK6FZM
NOVEMBER	MIKE	WB6TMH
DECEMBER	DARREL	WD6BOR

2021 VOMARC Net Control Assignments

	Name	Call
JANUARY	ROBERT	KA5WSS
FEBRUARY	DARREL	WD6BOR
MARCH	MOE	KI6JNU
APRIL	DAVE	KD6FIL
MAY	ED	W1EJ
JUNE	FRANK	KG6N
JULY	ED	W1EJ
AUGUST	CARL	N6TVN
SEPTEMBER	SAM	W5LTP
OCTOBER	DICK	KF6FZM
NOVEMBER	MIKE	WB6TMH
DECEMBER	DARREL	WD6BOR

VOMARC MEMBERSHIP 2021

Membership Dues: \$15/year individual; \$5/year family member at same address.

VOMARC encourages its members to join the ARRL. More information is available at www.arrl.org.

QST is available to blind and physically handicapped individuals on audio cassette from the Library of Congress, National Library Service for the Blind and Physically Handicapped. Call 1-800-424-8567.

Name: _____ CALL: _____ EMAIL: _____

Address: _____ APT: _____

City: _____ State: _____ ZIP: _____

Name: _____ CALL: _____ EMAIL: _____

Name: _____ CALL: _____ EMAIL: _____

VOMARC Membership: Complimentary with Class—Date: _____

Membership Moment, From the Database Queen:

Dues may be mailed to VOMARC in care of the Sonoma Police Department, 175 1st St West, CA 95476, or brought to the next meeting. Your check should be made payable to: **VOMARC**.